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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,639	11/24/2000	Richard Hans Harvey	063170.6601	3833

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EXAMINER

PANNALA, SATHYANARAYA R

ART UNIT	PAPER NUMBER
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2164

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/721,639

Applicant(s)

HARVEY, RICHARD HANS

Examiner

Sathyanarayan Pannala

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/25/2006 has been entered.

2. Applicant's Amendment filed on 1/25/2006 has been entered with amended claims 1, 4 and 11. In this Office Action claims 1-5, 11-12 are pending.

### ***Drawings***

3. The drawings filed on 1/25/2006 were received. These drawings are for Fig. 2, and Examiner approved it.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-5 and 11-12 are rejected under 35 U.S.C. § 101, because none of the claims are directed to statutory subject matter. Independent claims 1 and 11 deals with simple mathematical abstract idea of determining whether an instruction or operation. A claim that recites a computer that solely calculates a mathematical formula or a computer disk that solely stores a mathematical formula is not directed to the type of statutory subject matter eligible for patent protection. The claims are not producing useful, concrete and tangible results. See *Diehr*, 450 U.S. at 186 and *Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bachmann et al. (US Patent 6,085,188) hereinafter Bachmann, and in view of Byrne et al. (US Patent 6,347,312) hereinafter Byrne.

8. Bachmann teaches independent claims 1, 11 by the following:  
determining whether an instruction or operation adds an information entry or removes information entry from the database system, wherein for an add operation, the information entry is first added to an 'out' table, and wherein for a remove operation, the information entry is first removed from an 'in' table  
determining whether the instruction or operation is part of a modify entry instruction, the modify entry instruction operable to modify the information entry, the modify entry instruction comprising a plurality of an add and remove operations (Fig. 7-8, col. 6, line 47 to col. 7, line 15). Bachmann teaches the parent table and child table, which is analogous to using two tables of in and out and explicitly does not teach the in and out tables. However, Byrne teaches two tables which are similar to the purpose of in and out tables as Type I cache (40) and Type II cache (42). Type I is for a set of identifiers which qualify for a given LDAP search query of a particular filter key and the unit is indexed by that filter key. This way the repetitive search queries are handled without resort to the relational database (38). A record for Type one is the same as the in table.

Whereas Type II cache maintains results of the query (Byrne, Fig. 5, col. 5, line 50 to col. 6, lines 11). The search is done first and the data is filled into Type II and then search query in Type I one will be retained. When the search query did not find the record, the query will not be retained in the Type I and the result will not be available to store in the Type II. Thus, it would have been obvious to one of ordinary skill in the data processing art at the time of the invention, to combine teaching of the cited references because Byrne's teachings would have allowed Bachmann's method would have been efficient of handling of repetitive searches issued from a hierarchical directory service to a relational database backing store (Byrne, col. 2, lines 22-25).

Additionally, Examiner has experience in using Sybase database system. Sybase database uses out-table and in-table. These tables are system tables and every database system uses similar system tables. In case of Sybase, these tables could be accessed or seen by the system user. An application controlling the process creates a record in out-table and the system monitors the presence of records. The system disposes of the records in the in-table as they are acted upon as well as from out-table. When the system non-invasively monitors processes, an external application such as the application controlling the process disposes of the records as they are acted upon.

9. As per dependent claim 2, Bachmann teaches "the information is added to the 'in' table after being added to the 'out' table" (Fig. 8, col. 6, line 60 to col. 7, line 15).

10. As per dependent claim 3, Bachmann teaches "the information is removed from the 'out' table after being removed from the 'in' table" (Fig. 7, col. 6, lines 47-59).

11. As per dependent claim 4, Bachmann teaches "performing one entry operation of the plurality of add and remove entry operations if the instruction or operation is determining whether the instruction modify entry information" (Fig. 8, col. 5, lines 60-67, col. 6, lines 60-67).

12. As per dependent claims 5, 12 Bachmann teaches claimed "the instructions are implemented via a directory system such as X.500 or LDAP" (Fig. 4A-C, col. 4, lines 22-35).

### ***Response to Arguments***

13. Applicant's arguments filed 1/25/2006 with respect claims 1 and 11 have been fully considered but they are moot in view of the new ground(s) of rejection.

a) Applicant's argument states as "Bachmann, however, fails to teach, or suggest a modify entry instruction or an instruction that comprises a plurality of add and remove entry operation."

In response to Applicant's argument, Examiner respectfully disagrees with the applicant because Bachmann do teach this limitation at Fig. 8, col. 6, lines 60-67.

**Conclusion**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sathyanarayan Pannala whose telephone number is (571) 272-4115. The examiner can normally be reached on 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sathyanarayan Pannala  
Examiner